

CLAIMS

1. A method for labeling an object for its identification, which comprises the steps of:

page 3, lines 8-25

forming a pit and land coded message on a durable surface selected from one or more of a surface of said object or a tag which is attached to said object.

5

2. The method of claim 1, wherein said coded message is readable with a laser reader system.

10

3. The method of claim 1, wherein said coded message is overcoated with a coating, which comprises capsules formed from an encapsulant which encapsulates a biologic marker which are labeled with an agent that emits selected detectable wavelengths of energy when exposed to infrared radiation (IR), said capsules dispersed in a film-forming vehicle.

15

4. The method of claim 3, wherein said biologic marker is formed from encoded DNA bases.

5. The method of claim 3, wherein said agent is an up-converting phosphor.

20

6. The method of claim 3, wherein said agent is a lanthenide ion bound to a naphthalene group.

25

7. The method of claim 3, wherein said lanthenide ion is selected from the group consisting essentially of samarium (III), europium (III), terbium (III), dysprosium (III), and mixtures thereof.

30

8. The method of claim 4, wherein said encoded DNA bases are encoded with information to determine the place of origin of an object to which the label is affixed.

9. The method of claim 3, which is dispersed in a liquid matrix for spray application onto an object to be labeled.

10. The method of claim 3, wherein said encapsulant is casein, which has been cross-linked with itself.
- 5 11. The method of claim 3, wherein said capsules range in size from about 1 micron to about 1 millimeter.
12. The method of claim 3, wherein said capsules also contain a mask.
13. The method of claim 3, wherein said biologic marker comprises MHC.
- 10 14. The method of claim 3, wherein said encapsulant is a virus or a bacteria.
- 15 15. The method of claim 3, wherein said film-forming vehicle is one or more of acrylic resins, vinyl resins, urethane resins, urea resins, alkyd resins, polyesters, epoxy resins, or amine and phenol formaldehyde resins.
16. A labelled object, which comprises:
a pit and land coded message formed on a durable surface of an object selected from one or more of a surface of said object or a tag which is attached to said object
- 20 17. The labelled object of claim 16, wherein said coded message is encoded.
- 25 18. The labelled object of claim 16, wherein said coded message is readable with a laser reader system.
- 30 19. The labelled object of claim 16, wherein said coded message is overcoated with a coating, which comprises capsules formed from an encapsulant which encapsulates a biologic marker which are labeled with an agent that emits selected detectable wavelengths of energy when exposed to infrared radiation (IR), said capsules dispersed in a film-forming vehicle.
20. The labelled object of claim 19, wherein said agent is an up-converting phosphor.

21. The labelled object of claim 19, wherein said agent is a lanthenide ion bound to a naphthalene group.
- 5 22. The labelled object of claim 19, wherein said lanthenide ion is selected from the group consisting essentially of samarium (III), europium (III), terbium (III), dysprosium (III), and mixtures thereof.
- 10 23. The labelled object of claim 19, wherein said biologic marker comprises encoded DNA bases.
24. The labelled object of claim 19, which is dispersed in a liquid matrix for spray application onto an object to be labeled.
- 15 25. The labelled object of claim 19, wherein said encapsulant is casein, which has been cross-linked with itself.
26. The labelled object of claim 19, wherein said capsules range in size from about 1 micron to about 1 millimeter.
- 20 27. The labelled object of claim 19, wherein said capsules also contain a mask.
28. The labelled object of claim 23, wherein said encoded DNA bases are encoded with information to determine the place of origin of an object to which the label is affixed.
- 25 29. The labelled object of claim 19, wherein said biologic marker comprises MHC.
30. The labelled object of claim 19, wherein said encapsulant is a virus or a bacteria.
- 30 31. The labelled object of claim 19, wherein said film-forming vehicle is one or more of acrylic resins, vinyl resins, urethane resins, urea resins, alkyd resins, polyesters, epoxy resins, or amine and phenol formaldehyde resins.